

## WEST Search History





DATE: Thursday, February 02, 2006

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
		<i>DB=USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L13	US-5800628-A.did.	1
<input type="checkbox"/>	L12	US-5800628-A.did.	1
<input type="checkbox"/>	L11	US-5586567-A.did.	1
		<i>DB=PGPB; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L10	US-20040079400-A1.did.	1
<input type="checkbox"/>	L9	US-20040079400-A1.did.	1
<input type="checkbox"/>	L8	US-20040118435-A1.did.	1
<input type="checkbox"/>	L7	US-20040118435-A1.did.	1
		<i>DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L6	L5 with turbidity	5
<input type="checkbox"/>	L5	dish\$ with cleaning	3929
		<i>DB=PGPB,USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L4	L3 and 134/\$.ccls.	8
<input type="checkbox"/>	L3	L2 with turbidity	14
<input type="checkbox"/>	L2	dish\$ with cleaning	4864
<input type="checkbox"/>	L1	dish\$ with cleaning with determining with turbidity with spray with soil\$	0

END OF SEARCH HISTORY

## Hit List

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Search Results - Record(s) 1 through 5 of 5 returned.

- ☐ 1. Document ID: DE 10253017 B4, DE 10253017 A1, US 20040118435 A1, EP 1438920 A2

Using default format because multiple data bases are involved.

L6: Entry 1 of 5

File: DWPI

Sep 9, 2004

DERWENT-ACC-NO: 2004-451324

DERWENT-WEEK: 200459

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TITLE: Dishwasher operating method in which the turbidity of the cleaning water is measured in a pre-wash process and used by the dishwasher central control unit to automatically adjust operating parameters for the rest of the wash cycle

INVENTOR: BALTES, R; JUNG, C ; PETRY, K ; SCHWARZWELLER, P

PRIORITY-DATA: 2002DE-1053017 (November 14, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>DE 10253017 B4</u>	September 9, 2004		000	A47L015/46
<u>DE 10253017 A1</u>	June 3, 2004		004	A47L015/46
<u>US 20040118435 A1</u>	June 24, 2004		000	B08B007/04
<u>EP 1438920 A2</u>	July 21, 2004	E	000	A47L015/42

INT-CL (IPC): A47 L 15/00; A47 L 15/42; A47 L 15/46; B08 B 7/04; G01 N 21/53; G05 B 13/02

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">K/M/C</a>	<a href="#">Drawings</a>
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- ☐ 2. Document ID: US 20040079400 A1

L6: Entry 2 of 5

File: DWPI

Apr 29, 2004

DERWENT-ACC-NO: 2004-347322

DERWENT-WEEK: 200432

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TITLE: Dishwasher, for cleaning tableware, has a controller used to control the operational state of the pump through controller in response to the detected turbidity of the washing liquid

INVENTOR: YOUNG, R A

PRIORITY-DATA: 2002US-0280357 (October 25, 2002)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>US 20040079400 A1</u>	April 29, 2004		005	B08B003/00

INT-CL (IPC): B08 B 3/00

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 3. Document ID: US 20030142316 A1, EP 1335060 A1, KR 2003066373 A, US 6771373 B2, CN 1576823 A

L6: Entry 3 of 5

File: DWPI

Jul 31, 2003

DERWENT-ACC-NO: 2003-897412

DERWENT-WEEK: 200538

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TITLE: Sensor for household appliances, has temperature sensing unit which senses temperature of cleaning medium, is arranged in base at greater distance away from specific optical element

INVENTOR: SCHENKL, J; WILHELM, G

PRIORITY-DATA: 2002EP-0001933 (January 31, 2002), 2003CN-0150339 (July 28, 2003)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>US 20030142316 A1</u>	July 31, 2003		007	G01N021/59
<u>EP 1335060 A1</u>	August 13, 2003	G	000	D06F039/00
<u>KR 2003066373 A</u>	August 9, 2003		000	G01N021/00
<u>US 6771373 B2</u>	August 3, 2004		000	G01N021/00
<u>CN 1576823 A</u>	February 9, 2005		000	G01N021/47

INT-CL (IPC): A47 L 15/00; A47 L 15/46; D06 F 37/42; D06 F 39/00; G01 K 1/02; G01 N 21/00; G01 N 21/47; G01 N 21/53; G01 N 21/59

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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☐ 4. Document ID: DE 19745428 C2, DE 19745428 A1, US 5800628 A

L6: Entry 4 of 5

File: DWPI

Oct 31, 2002

DERWENT-ACC-NO: 1998-273475

DERWENT-WEEK: 200273

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TITLE: Domestic dishwasher with variable cleaning of articles being washed - regularly measures turbidity of wash water to determine cleaning

INVENTOR: ERICKSON, T K; O'BRIAN, G R ; O'BRIEN, G R

PRIORITY-DATA: 1996US-0734937 (October 22, 1996)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>DE 19745428 C2</u>	October 31, 2002		000	A47L015/42
<u>DE 19745428 A1</u>	May 14, 1998		009	A47L015/42
<u>US 5800628 A</u>	September 1, 1998		000	B08B003/02

INT-CL (IPC): A47 L 15/42; B08 B 3/02

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Drawings
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☐ 5. Document ID: KR 378501 B, WO 9621391 A1, CA 2164655 A, AU 9646967 A, EP 750467 A1, US 5586567 A, JP 09510647 W, KR 97701515 A, AU 692993 B, EP 750467 B1, DE 69615462 E, ES 2162026 T3

L6: Entry 5 of 5

File: DWPI

Jun 9, 2003

DERWENT-ACC-NO: 1996-341991

DERWENT-WEEK: 200367

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TITLE: Fluid turbidity sensing mechanism for cleaning appts. e.g. dishwater - directs radiation from light source through circulating cleaning fluid on to sensor, which outputs signal w.r.t. turbidity of fluid

INVENTOR: DAUSCH, M E; SCHNEIDER, D A ; SMITH, J M ; WHIPPLE, W

PRIORITY-DATA: 1995US-0370795 (January 10, 1995)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>KR 378501 B</u>	June 9, 2003		000	A47L015/46
<u>WO 9621391 A1</u>	July 18, 1996	E	023	A47L015/46
<u>CA 2164655 A</u>	July 11, 1996		000	A47L015/46
<u>AU 9646967 A</u>	July 31, 1996		000	A47L015/46
<u>EP 750467 A1</u>	January 2, 1997	E	001	A47L015/46
<u>US 5586567 A</u>	December 24, 1996		008	A47L015/46
<u>JP 09510647 W</u>	October 28, 1997		019	A47L015/46
<u>KR 97701515 A</u>	April 12, 1997		000	A47L015/46
<u>AU 692993 B</u>	June 18, 1998		000	A47L015/46
<u>EP 750467 B1</u>	September 26, 2001	E	000	A47L015/46
<u>DE 69615462 E</u>	October 31, 2001		000	A47L015/46
<u>ES 2162026 T3</u>	December 16, 2001		000	A47L015/46

INT-CL (IPC): A47 L 15/46

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Drawings
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Search Results - Record(s) 1 through 8 of 8 returned.

☐ 1. Document ID: US 20040163679 A1

Using default format because multiple data bases are involved.

L4: Entry 1 of 8

File: PGPB

Aug 26, 2004

PGPUB-DOCUMENT-NUMBER: 20040163679

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040163679 A1

TITLE: Device for measuring the turbidity of the rinsing liquid in a dishwasher

PUBLICATION-DATE: August 26, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Jung, Clemens	Bruecken		DE
Schwarzweiler, Peter	St. Wendel		DE
Petry, Konrad	Mandelbachteil 3		DE
Baltes, Reinhold	Roschberg		DE

US-CL-CURRENT: [134/25.2](#); [134/113](#), [134/18](#), [134/57D](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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☐ 2. Document ID: US 20040118435 A1

L4: Entry 2 of 8

File: PGPB

Jun 24, 2004

PGPUB-DOCUMENT-NUMBER: 20040118435

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040118435 A1

TITLE: Method of operating a dishwasher with a central control unit

PUBLICATION-DATE: June 24, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Jung, Clemens	Bruecken		DE
Schwarzweiler, Peter	St. Wendel		DE
Petry, Konrad	Mandelbachteil		DE
Baltes, Reinhold	Roschberg		DE

US-CL-CURRENT: 134/18; 134/25.2

## ABSTRACT:

The invention relates to a method of operating a dishwasher with a central control unit, by measuring the turbidity of the rinsing liquid and establishing the course of the program as a function of the turbidity of the rinsing liquid. In a pre-rinse operation, measurement values determined by a sensor system are derived from the soiling of the rinsing liquid and supplied to the control unit, which calculates therefrom associated parameters for the further course of the program and establishes the latter correspondingly.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 3. Document ID: US 20030019510 A1

L4: Entry 3 of 8

File: PGPB

Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030019510

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030019510 A1

TITLE: Dishwasher including a turbidity sensor

PUBLICATION-DATE: January 30, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Hegeman, Arian Johannes	Pembroke	NH	US
Haidar, Omar	Louisville	KY	US
McIntyre, Michael Lee	Cox's Creek	KY	US

US-CL-CURRENT: 134/18; 134/111, 134/57D

## ABSTRACT:

In one aspect, a dishwasher comprising a control mechanism coupled to a sensor for generating an output representative of an amount of soil in the dishwasher water is described. The dishwasher comprises a tub, at least one filter for filtering water in the tub, and a fluid circulation assembly for circulating water in the tub. The control mechanism is configured to determine whether corrective action is needed to unclog the filter based on a signal output by the sensor.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw D
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☐ 4. Document ID: US 6544344 B2

L4: Entry 4 of 8

File: USPT

Apr 8, 2003

US-PAT-NO: 6544344

DOCUMENT-IDENTIFIER: US 6544344 B2

**\*\* See image for Certificate of Correction \*\***

TITLE: Dishwasher including a turbidity sensor

DATE-ISSUED: April 8, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hegeman; Arian Johannes	Pembroke	NH		
Haidar; Omar	Louisville	KY		
McIntyre; Michael Lee	Cox's Creek	KY		

US-CL-CURRENT: 134/18; 134/25.2, 134/56D, 134/57D, 134/58D

## ABSTRACT:

In one aspect, a dishwasher comprising a control mechanism coupled to a sensor for generating an output representative of an amount of soil in the dishwasher water is described. The dishwasher comprises a tub, at least one filter for filtering water in the tub, and a fluid circulation assembly for circulating water in the tub. The control mechanism is configured to determine whether corrective action is needed to unclog the filter based on a signal output by the sensor.

17 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVMC	Draw. De
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☐ 5. Document ID: US 6343611 B1

L4: Entry 5 of 8

File: USPT

Feb 5, 2002

US-PAT-NO: 6343611

DOCUMENT-IDENTIFIER: US 6343611 B1

TITLE: Reduced energy cleaning appliance

DATE-ISSUED: February 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
El-Shoubary; Youssef	North Brunswick	NJ		
Kim; Bang Mo	Schenectady	NY		
Jacobus; Dwight William	Louisville	KY		
Spanyer; Andrew Joseph	Louisville	KY		
Tobbe; Joseph Duane	Taylorsville	KY		
Dausch; Mark Edward	Latham	NY		

US-CL-CURRENT: 134/109; 134/110, 68/18R



## ABSTRACT:

The appliance comprises a container for receiving the soiled articles, a circulation pump for distributing a hot liquid to the container, a drain positioned in the container and connected to the pump for emptying the liquid from the container upon completion of a cycle and a hydroclone connected to the drain and the pump, for removing soil from the liquid such that about ninety percent (90%) of the liquid distributed to the container during one cycle can be utilized during at least one subsequent cycle. Another embodiment includes a dishwasher having a normal operating cycle, the dishwasher comprising a container for accommodating a plurality of articles, a circulation pump for delivering a liquid to the container and for circulating the liquid within the container, a diverter connected to the circulation pump for diverting at least a portion of the circulating liquid to a hydroclone while returning at least about ninety percent (90%) of the liquid diverted to the hydroclone to the circulating liquid, the returned liquid having at most about 0.02% solids contained therein.

14 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWC	Draw. Des.
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☐ 6. Document ID: US 6001190 A

L4: Entry 6 of 8

File: USPT

Dec 14, 1999

US-PAT-NO: 6001190

DOCUMENT-IDENTIFIER: US 6001190 A

TITLE: Reduced energy cleaning appliance

DATE-ISSUED: December 14, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
El-Shoubary; Youssef	North Brunswick	NJ		
Kim; Bang Mo	Niskayuna	NY		
Jacobus; Dwight William	Louisville	KY		
Spanyer; Andrew Joseph	Louisville	KY		
Tobbe; Joseph Duane	Taylorsville	KY		
Dausch; Mark Edward	Cohoes	NY		

US-CL-CURRENT: 134/10; 134/109, 134/18, 134/25.1, 134/25.2

## ABSTRACT:

The appliance comprises a container for receiving the soiled articles, a circulation pump for distributing a hot liquid to the container, a drain positioned in the container and connected to the pump for emptying the liquid from the container upon completion of a cycle and a hydroclone connected to the drain and the pump, for removing soil from the liquid such that about ninety percent (90%) of the liquid distributed to the container during one cycle can be utilized during at

least one subsequent cycle. Another embodiment includes a dishwasher having a normal operating cycle, the dishwasher comprising a container for accommodating a plurality of articles, a circulation pump for delivering a liquid to the container and for circulating the liquid within the container, a diverter connected to the circulation pump for diverting at least a portion of the circulating liquid to a hydroclone while returning at least about ninety percent (90%) of the liquid diverted to the hydroclone to the circulating liquid, the returned liquid having at most about 0.02% solids contained therein.

2 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	K/MC	Draw. De
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☐ 7. Document ID: US 5800628 A

L4: Entry 7 of 8

File: USPT

Sep 1, 1998

US-PAT-NO: 5800628

DOCUMENT-IDENTIFIER: US 5800628 A

TITLE: Continuous cycle operation for dishwashers using turbidity sensor feedback

DATE-ISSUED: September 1, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erickson; Timothy K.	Lena	IL		
O'Brien; Gary R.	Freeport	IL		

US-CL-CURRENT: 134/18; 134/25.2, 134/56D, 134/57D, 134/58D, 68/12.02

ABSTRACT:

A method for washing objects automatically provides the taking of turbidity measurements before and after a portion of water is removed from the dishwasher. This partial drain allows first and second magnitudes of turbidity characteristics, taken before and after the partial drain, to be compared to each other for an analysis of the degree and/or character of particulates within the water of a dishwasher. In certain applications of this method, the turbidity characteristics can be the absolute magnitude of turbidity, the rate of change of turbidity, the absolute magnitude of turbidity variability and the rate of change of the absolute magnitude of turbidity variability. The portion of water removed between the two sets of readings that yield the first and second magnitudes of the selected characteristics is less than the total amount of water within the dishwasher.

20 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	K/MC	Draw. De
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☐ 8. Document ID: US 5586567 A

L4: Entry 8 of 8

File: USPT

Dec 24, 1996

US-PAT-NO: 5586567

DOCUMENT-IDENTIFIER: US 5586567 A

TITLE: Dishwasher with turbidity sensing mechanism

DATE-ISSUED: December 24, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Smith; John M.	Louisville	KY		
Schneider; David A.	Louisville	KY		
Dausch; Mark E.	Latham	NY		
Whipple, III; Walter	Amsterdam	NY		

US-CL-CURRENT: 134/57D; 134/113, 356/442, 68/12.02, 68/12.27

## ABSTRACT:

A turbidity sensing mechanism for a dishwasher is connected in the fluid circulation conduit between the pump and the spray mechanism. The mechanism includes a hollow housing enclosing a hollow transparent tube connected in fluid flow relationship with the conduit. A source of electromagnetic radiation and a radiation-to-frequency sensor are positioned inside the housing on opposite sides of the tube.

10 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequence	Attachments	Claims	KMC	Draw De
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Term	Documents
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134/10	1177
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"134/102.2"	250
"134/102.3"	140

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"134/103.2"	323
"134/103.3"	62
"134/104.1"	285
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